Northwest Fisheries Science Center Fish Ecology Division 2725 Montlake Boulevard East Seattle, Washington 98112-2097

September 29, 2005

MEMORANDUM FOR: F/NWR3 - Leslie Schaeffer

FROM: F/NWC3 - John W. Ferguson

SUBJECT: Request for Modification of ESA Permit

#1290 to Integrate Coho Salmon Listing

Status Change

We request modification of ESA Section 10 Permit #1290 to incorporate coho salmon take as a result of recent changes to ESA listing status for this species in the Columbia River. The request affects Section A, Take Descriptions and/or Levels, of the Permit; all other sections of the application remain unchanged.

The primary purpose of the research covered under this permit is to evaluate the importance of the Columbia River estuary to baitfish populations and salmonid marine survival. Juvenile salmon are caught in the estuary by purse seine and also taken from the salmon by-pass system at Bonneville Dam. Those coho salmon taken from the Bonneville Dam by-pass system are not from listed stocks, and represented fewer than 180 juveniles in 2005. Purse seining in the estuary does impact lower Columbia River coho salmon; the maximum number of coho salmon caught in this pursuit was 127 in 2003. We estimate that we would capture at most 200 juvenile coho salmon during our purse seine operations annually. The listed portion of coho salmon affected by our study appears in Table 1. We request that these numbers be added to the existing take table so that coho salmon take is covered under Permit #1290.

For this research, all adult coho salmon encountered are immediately returned to the estuary, with no observed mortalities in past sampling. As with other juvenile salmonids encountered in this work, juvenile coho salmon are measured and then frozen for later laboratory analyses (genetics, lipids, disease, age and growth, and feeding). Appropriate take categories for each of these actions is included in the attached table.

If you have any questions concerning this request, please contact Robert Emmett at (541) 867-0109.

Attachment

cc: F/NWC3 - Casillas

F/NWC3 - Emmett

F/NWC3 - Frick

F/NWC3 - Gores

F/NWC3 - Jacobson

Table 1. Estimated annual take descriptions of recently ESU-listed coho salmon during the Columbia River estuary purse seine activities. All juveniles are sacrificed and taken to the laboratory for further analysis; adults are immediately returned to the system at the point of capture.

ESU/Species	Origin	Life Stage	Take Activity	Maximum Number of Fish Estimated to Take	Requested Authorized Unintentional Mortality	Research Location	Research Period
	Wild (no						
Lower Columbia River	adipose		Capture, handle,				
(LCR) Coho salmon	clip)	Adult	release	1	0	Columbia River estuary	April - November
	Wild (no						
	adipose		Intentional				
LCR Coho salmon	clip)	Juv.	mortality	3	N/A	Columbia River estuary	April - November
	Hatchery						
	(adipose		Capture, handle,				
LCR Coho salmon	clip)	Adult	release	10	0	Columbia River estuary	April - November
	Hatchery				·		
	(adipose		Intentional				
LCR Coho salmon	clip)	Juv.	mortality	81	N/A	Columbia River estuary	April - November